

CLAIMS

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is as follows:

- 1 1. A lithography system, comprising:
2 a reticle chamber having a reticle chamber opening;
3 a reticle chamber maintenance panel which is removably mounted to
4 the reticle chamber opening; and
5 a reticle stage housed within the reticle chamber and accessible and
6 removable through the reticle chamber opening.
- 1 2. The lithography system of claim 1, wherein the reticle stage is removable
2 from the reticle chamber in a first direction which is in a plane substantially
3 horizontal to a reticle table mounted to the reticle stage.
- 1 3. The lithography system of claim 2, wherein the reticle chamber
2 maintenance panel is pivotably mounted to the reticle chamber.
- 1 4. The lithography system of claim 1, wherein the reticle chamber opening is
2 at an angle substantially equal to or between 0° and 45° with relation to the
3 reticle chamber.
- 1 5. The lithography system of claim 1, wherein the reticle chamber opening is
2 at an angle at or greater than 45° with relation to the reticle chamber.
- 1 6. The lithography system of claim 1, further comprising:
2 a projection optic system;

3 an illuminator optic system; and
4 a reticle table mounted to the reticle stage and positionable between
5 the projection optic system and the illuminator optic system.

1 7. The lithography system of claim 6, wherein the reticle table and the reticle
2 stage are removable through the reticle chamber opening in a plane which is
3 substantially perpendicular to a source illuminating from the illuminator optic
4 system.

1 8. The lithography system of claim 7, further comprising a body structure
2 which is mounted to a lower portion of the reticle chamber, the projection
3 optic system and the illuminator optic system being mounted to the body
4 structure.

1 9. The lithography system of claim 1, wherein the reticle chamber
2 maintenance panel is semi-cylindrically shaped.

1 10. The lithography system of claim 1, wherein the reticle stage is removeable
2 without disassembling the projection optic system or the illuminator optic
3 system.

1 11. The lithography system of claim 1, wherein the reticle chamber opening
2 provides substantially complete access to the reticle stage.

1 12. The lithography system of claim 1, wherein the reticle chamber opening
2 provides access to substantially a center of gravity of the reticle stage.

1 13. A lithography system, comprising:

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2 a reticle chamber having a reticle chamber angled opening,
3 a reticle chamber maintenance panel which is removably mounted to
4 the reticle chamber angled opening;
5 an optical system for illuminating and projecting a source;
6 a reticle stage having a reticle table, the reticle table positioned
7 between components of the optical system and housed with the reticle stage
8 within the reticle chamber,
9 wherein the reticle chamber angled opening provides access to the
10 reticle stage.

1 14. The lithography system of claim 13, wherein the reticle chamber angled
2 opening provides access to the reticle stage at substantially a center of gravity.

1 15. The lithography system of claim 14, wherein the reticle stage is
2 removable from the reticle chamber via the reticle chamber angled opening.

1 16. The lithography system of claim 14, wherein the reticle stage is
2 removable from the reticle chamber via the reticle chamber angled opening in
3 a first direction which is in a plane substantially horizontal to the reticle table.

1 17. The lithography system of claim 13, wherein the reticle chamber
2 maintenance panel is pivotably mounted to the reticle chamber.

1 18. The lithography system of claim 13, wherein the reticle angled chamber
2 opening is at an angle of approximately 45° with relation to the reticle
3 chamber such that the reticle chamber maintenance panel is removed, the
4 reticle stage partially extends from the reticle chamber.

- 1 19. The lithography system of claim 13, further comprising a body structure
2 which is mounted to a lower portion of the reticle chamber, the projection
3 optic and the illuminator optic being mounted to the body structure during the
4 removal of the reticle table and the reticle stage.
- 1 20. The lithography system of claim 13, wherein the reticle chamber
2 maintenance panel is semi-cylindrically shaped.